Newland

NLS-PT800 Series

Portable Data Collection Terminal

User Manual

Newland

For Release Version

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Product Classification and Configuration

PT850, with Laser sensor, can read all 1D barcodes of ISO standard.

PT810, with RFID sensor, RFID reading modules can be configured to meet different uses.

Model		Laser	RFID	GPRS	CDMA	WiFi
PT850	RG	√		√		
	RC	√			√	
	RW	√				√
	MI	√	√			
	TI	√	√			
	EI	√	√			
PT810	MI		√			
	MIRG		√	√		
	TI		√			
	TIRG		√	√		
	EI		√			
	EIRG		√	√		

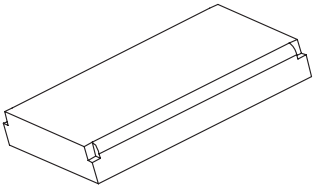
Note: “MI” means that the module of RFID is Mifare13.56MHz. “EI” means that the module of RFID is EM 125KHz. “TI” means that the module of RFID is TI 13.56MHz.

Accessories and Options

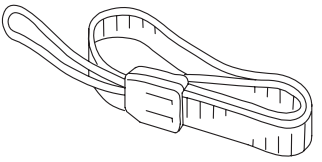
Accessories

» NLS-PT800 Portable Data Collector

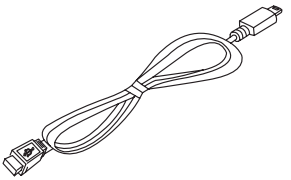
» Lithium Battery



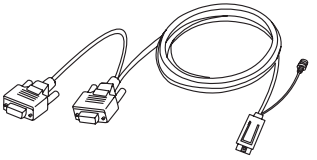
» Belt



» Communication Data Cable

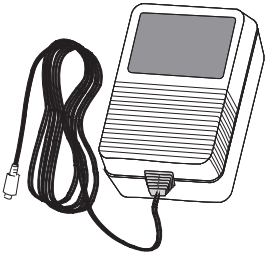


USB Cable



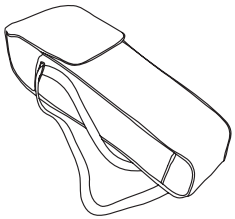
RS232 Cable

» 5.6V Power Adapter

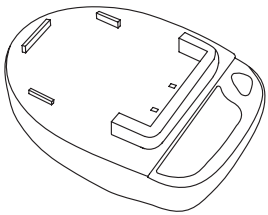


Options

» Leather Case



» Lithium Battery Charger



» NLS-CD800 Multi-function Base

Warning!

Cautions

» Disassemble and Refit

Unauthorized disassemble and refit will avoid the limited warranty

» Power Adapter

Only manufacturer original power adapter should be applied. Improper adapter causes permanent damage and avoids the limited warranty

» Phenomenon & Safety

Avoid using in extreme atmosphere, for example near a flame or fire. Pull out off the mains immediately when the device emitting peculiar heat, smell or smoke.

» Drop

Deadly dropping causes permanent damage. Switch power off immediately and contact your supplier.

» LCD Touch Screen

Avoid deadly pressure or impact on LCD.

Prohibited touching the exudation liquid if LCD is broke. The liquid is biological highly hazardous.

» Stack Limit

Do not stack heavy object onto the device (package).

» Environment

Use, place, restore the device in a careful and steady manner. Do not leave it on an uneven surface. Avoid damp or dusty environment. It may cause electric shock, breakdown or fire. Avoid prolonged exposure to the sun.

» Radiation Safety

Prohibit use in radiation restricted area, such as on the plane, in the gas station or in the hospital.

Prohibit battery charging and communication (wire & wireless) in explosive environment.

General Usage Tips

» When system halt, press “Reset” button using the stylus pen.

» Crash, throw, impact and fold will cause permanent LCD damage, system halt and irreversible data loss.

» Use brush and soft cloth to keep the scan window clean is the only work needs to do. Improper maintenance will avoid limited warranty.

» Do not use sharp object to operate keyboard and the touch screen.

» Only use dry and soft cloth to clean the device. Any liquid cleanser may cause housing distortion and aging.

» Do not leave the device face down.

» Do not remove battery when the device is power on. It will cause data loss.

» Sudden temperature change will cause dew. It may disturb normal performance. Avoid sudden temperature change. Do not use the device until dew naturally dried.

Battery Usage & Cautions

» Flame or fire the battery will cause explosion!

» To reach the best capacity, battery should be charged and discharged thoroughly for 2~3 times.

» Average life-span is 500 times charge and discharge, each. Please order new batteries when the endurance becomes shorter significantly.

» Only manufacturer approved battery and adapter should be applied.

» Disconnect the adapter from the mains when it is not charging. Prolonged charging (for one week) will shorten battery life-span. Full charged battery will naturally discharge if leave unused.

» Exhaust the battery before charge by leaving the device power on. Do not discharge by other means.

» Do not use invalid battery and adapter. 。

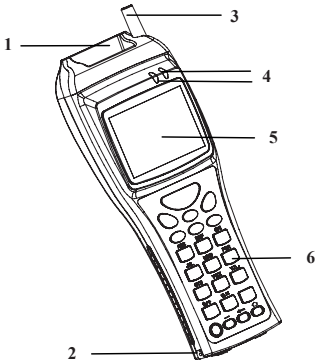
» Please recycle the battery cautiously. Do not process it with municipal solid waste.

Specifications

Specification		NLS-PT850	NLS-PT810
CPU		ARM7, 32 bit RISC, 74 MHz	
Memory		SDRAM: 8 MB	
		NAND Flash: 32MB, expandable to 128MB	
Display		4 level gray LCD, 160*128 resolution	
Keyboard		23 keys	
MTBF		5000 hours	
Interface	RS232	9.6~115.2kbps	
	USB	Slave1.1	
	GPRS	GSM 900 / 1800 MHz, 85.4Kbps(Max)	
	CDMA	800 MHz, 153.6Kbps (Max)	
	WiFi	IEEE 802.11g, 2.4GHz, DSSS,14dBm, WEP 64/128	
Reading Modes		Laser	RFID
Symbologies		Code128,EAN-13,EAN-8,Code39,UPC-A,UPC-E, Codabar, Interleaved 2 of 5,China post 25,ISBN/ ISSN,Code93, etc.	Mifare(ISO 14443A) TI(ISO 15693) EM(125K)
Precision		≥6 mi	
Power	Battery	3.6 V Li-battery, 1000 mAH	
	Standby Time	≧240 hours	
	Scan Time	>5000 times	
	Adapter	Output: DC 5.6 V, 1.5 A; Input: AC100~240V, 50~60HZ	
	Power Consumption	3.5 W (Max)	
Environment	Operate Temperature	-5 ℃ ~ + 45 ℃	
	Storage Temperature	-20 ℃ ~ + 55 ℃	
	Operate Humidity	5% - 90% (no condensation)	
	Storage Humidity	5% - 95% (no condensation)	
Drop		1.2 m drops to concrete	
Weight		300 g	
Dimensions		200 mm(L) * 72 (W)mm * 34 (H) mm	
Operating System		uBase III	
Certificates		CE EMC Class B, CCC	

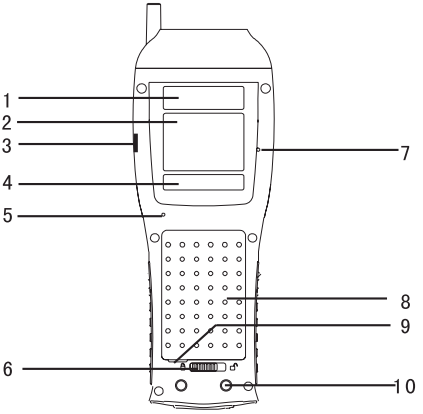
Get familiar with PT800

Front and side face of PT 800



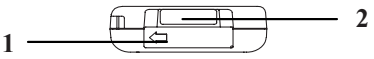
1. Eye of Laser
2. Wrist Strap Hook
3. An antenna (there is an antenna if to purchase a scanner with GPRS module)
4. Indicator Lights
5. LCD Screen
6. Stroke Keys

The back of PT800



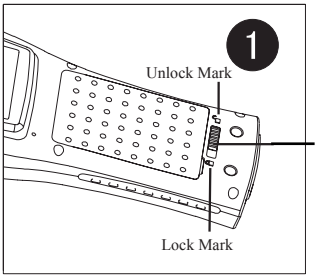
1. Warning Mark
2. Product Model
3. *USB Interface
4. Product ID
5. Reset
6. Lock of battery compartment
7. Buzzer speaker
8. Bolt
9. Tab/slot of battery compartment
10. Charger/AC terminal

The bottom of PT800

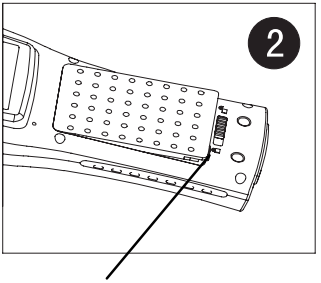


1. Serial Port Aegis Rubber
2. Infrared Port

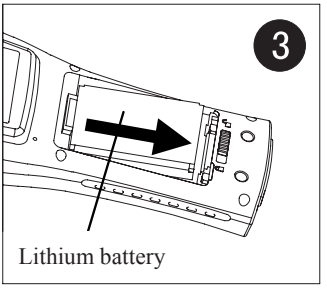
Mount Battery



Step 1:
Push the cover lock of battery compartment toward the unlock mark.

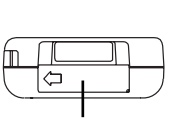


Step2：
Lift the slot to open the battery compartment cover, and remove the cover.



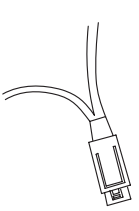
Step 3:
Slide in the direction of arrowhead, and get the lithium battery out.

Adapter of external power

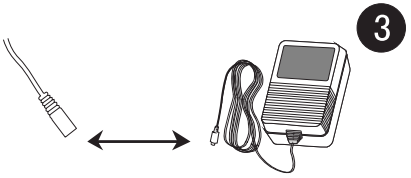


Serial Port Aegis Rubber

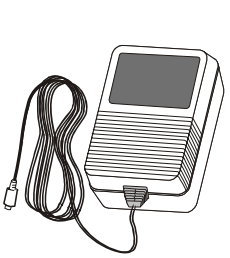
Step 1:
Open the aegis rubber of the serial port.



Step 2:
Connect the communication cable line shown in the picture to the joint of PT800 serial port.



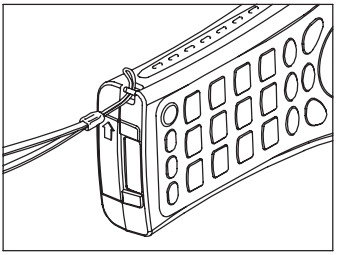
Step 3:
Connect the PT800 communication cable line shown in the picture to the joint of 5.6V power adapter.



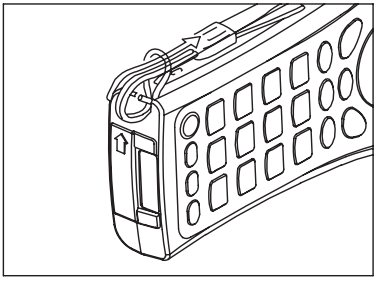
Step 4:
Connect 5.6V power adapter to a socket of AC power with a rated voltage, with an external power to PT800 and/or recharge the lithium battery at the same time.

Wrist strap

Attach wrist strap

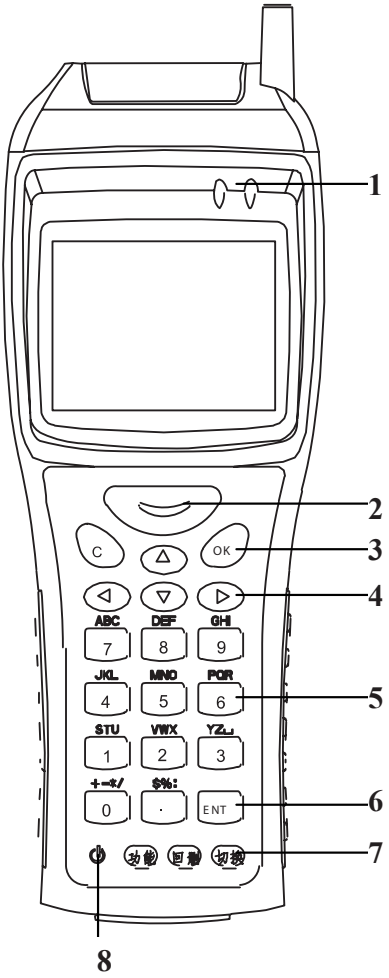


Step 1:
Pass the thin end of wrist strap through the metal hand strap mounted on the bottom side of the device.



Step2：
Lift the slot to open the battery compartment cover, and remove the cover.

Indicators and keyboard



1、Indicators

The light on right indicates power recharge. The bright red means that the recharge starts; if you did not connect the male and female of charging terminals properly, or the battery system is not completely charged, the light is glimmering.

The light on left means the charge is done and ready for a user.

2、Trigger key

Trigger a bar code reading operation.

3、Commit key, cancel key

C: Cancels input

OK: Registers input

4、 Keys of Direction

5、Composite keys

The keys of compounded-usage for digit, alpha, symbol with a switch key to transport from one to another.

6、Enter key

Optional entry to which the cursor is pointed.

7、Function keys

Function: able to be set as a shortcut key for a certain function.

Backspace: delete a former character of current cursor in the text entry.

8、Power key

To control the keys of turn-on, turn-off, and dormancy.

Turn ON / OFF, Idle and Charge

» Turn ON

Touch the turn-on key of PT800, it will enter the system of operation in about 3-5 seconds.

» Idle

After turn on, gently touch the key of turn-on; PT800 will enter into the state of idle immediately (in the instance the function of Idle is turned ON).

Timing in the system is also able to be set for the state of Idle automatically.

Press any key to withdraw from the state of Idle.

» Turn OFF

Press the power key of PT800 without a stop,

System hints: “POWER DOWN....”, which means the data is storing,

System hints: the storage of data is done! Please remove the continuous press on the power key.” It means the storage of data has already done, and the press to the key of power can be stopped, then the system of

PT800 turn off the power automatically.

*In the state of down, press power key of PT800 for 10 seconds, the system will be turned off automatically.

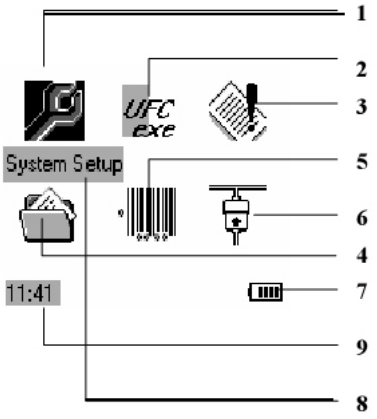
» Charge

Able for PT800 to connect external power communication cable to 5.6V power with the adapter to operate charge.

Also able to make use of multi-function base to charge.

A time needed to charge is 3 hours. When the indicator red light goes out, it means the task of charge is done.

*Notice: It is perfect to use the adapter along with the device of PT800, please do not make use of any other adapter unless certificated to do charge by the manufacturer.



1. System Setup:

Setting the parameter of system just as the interface for a PC. If it is black on the screen that means the cursor of the system is right on the running program.

2. Application:

Performing the applied process it set.

3. System Info:

Describe the basic information of the system.

4. File Browse:

It functions as a file of documents in a PC.

5. Scan Barcode/RFID:

This is an applied program to identify bar code or RFID.

6. Download:

To download document and software for NLS-PT800.

7. Indicate quantity of electric charge inside the battery/batteries, the maximum volume is 5.

8. Display of the program system:

It displays the description and information of a program.

9. Clock / Timer

*Notice: the system of NLS-PT800 is capable of programming; the final function and its interface on the screen will be different from the description in this hand manual.

How to make use of menu

» Direction key:

The keys of up and down mean to move cursor up or down according to a function in the menu. And the keys of right and left mean to move cursor right or left in the screen.

» The keys of OK and C:

OK means to commit the current function and withdraw.

C means to cancel a function and withdraw.

» Key of ENT

It means to put a function into operation with the cursor shows.

The Setting of System

1、“Date/Time Setup”：set the time for the running system.

2、“App Management”：to set current operating program

3、“Beep Setup”：turn on the sound for a turned off system

4、“LCD Setup”：Adjust the light of contrast and the light of background

5、“Power Options”：Set up the auto function to turn off and dormancy.

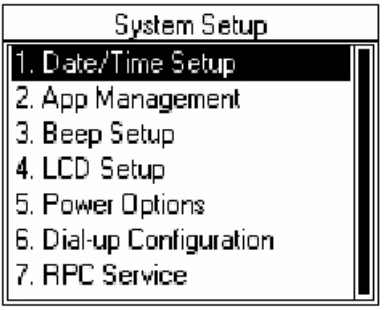
6、“Dial-up Configuration”：Input the parameter of MODEM, and GPRS for dial-up.

7、“RPC Service”：communicate with PC

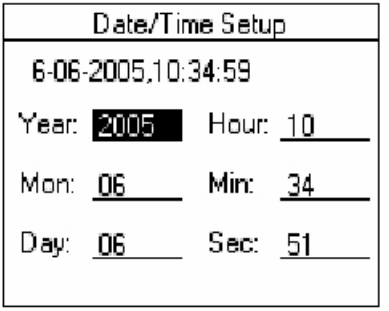
8、“OEMID Setup”：Set OEMID

How to set up time

Step1. press the direction keys up and down to move cursor to the position of system setting, and press OK or ENT, you can enter the system of setting



Step2. Press up or down to move the cursor to the position of time setting, and then press OK or ENT, you can operate the function of time setting.

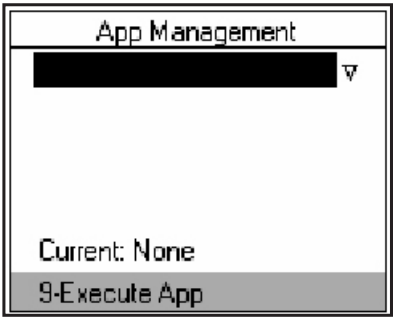


Step3. Press up or down key to the item, which you want to put into operation and press ENT until to enter the system you want to set up. And you can move the cursor with the keys up and down to any item you want to get its setting.

Step4. Press OK to commit a setting and a withdraw from it, or press C to cancel the setting and withdraw from it.

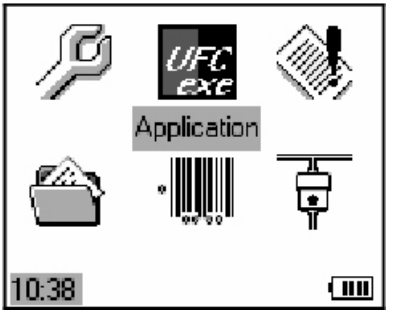
How to run an applied program

Step1. Enter the management of program in the page of system setting.



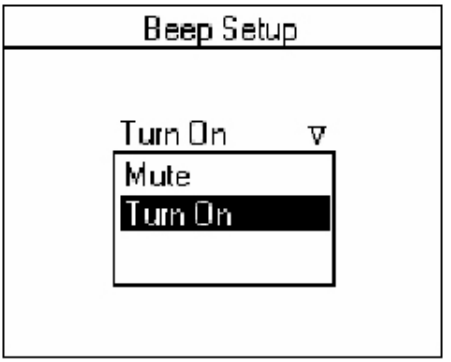
Step2. Press ENT to enter the item, which was pulled down. Press the key of OK to commit the option or press the key of C to cancel the choice.

Step3. Press key of OK to commit the function and withdraw while press the key of C to cancel the work and withdraw.



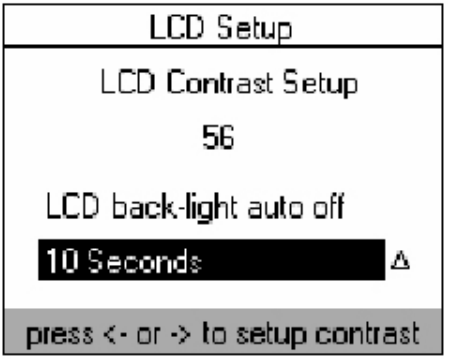
Step4. In the system running page, the machine will performs the function if you set the item of running program.

How to get rid of voice



At the page to set up the voice you can turn on the system of voice or turn off the voice.

How to adjust the contrast on LCD screen? Manage to set the background light in order to make full use of the power for the running system?

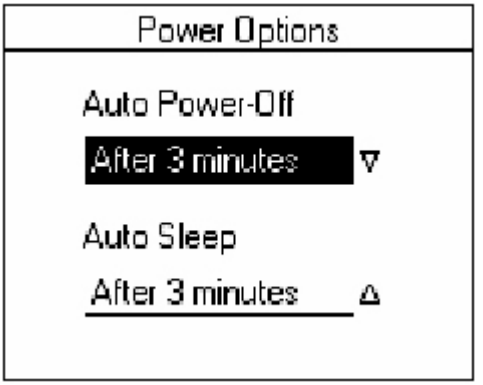


The contrast display on LCD screen is very different from the temperature.

At the page of screen setting, you can move the cursor right or left so that to a best contrast you need.

You can also adjust the auto timer for background light. If you do not operate the keyboard, the system will turn off the background light automatically. And you can also turn off the backlight to save the power.

How to enter the style of idle or turn off the machine automatically in order to save more power



At the page about power management, you can set the timer auto turn-off. It will function in a few minutes after setting. While if to set the timer at auto idle, your system will enter the idle condition in a while. All these are just in order to save the power for your machine.

How to connect MODEM / GPRS?

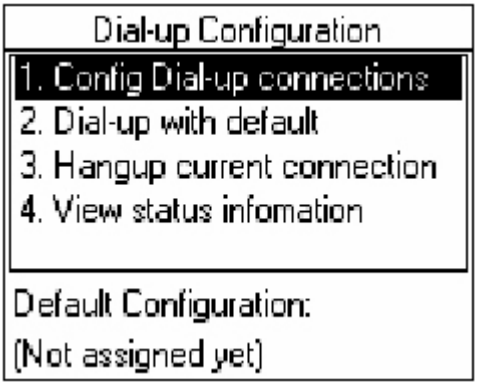
The type of PT800 provides you an easy way to connect with Internet with four different methods:

» Dial-up with the input module of GPRS / CDMA modem;

» Dial-up with the modem of telephone line;

» Dial-up with COM1 met to an outset of GPRS / CDMA modem or GPRS / CDMA via a mobile telephone;

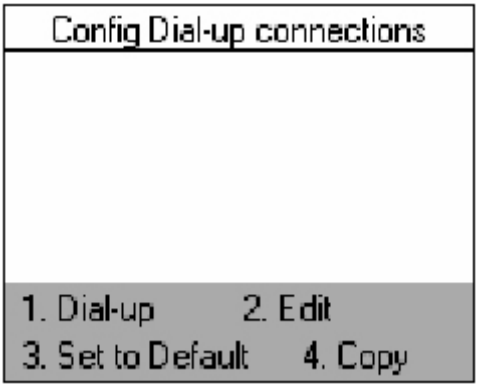
» Surf the Internet from Null Modem Serial Cable with a dial-up to the service PPP of Windows2000, which can set up a port with Internet of TCP/IP, then to share the software from the Internet via the service of Windows2000.



How to set OEMID to make the application programs you develop for PT800 safer?

OEMID is a figure composed of the digit from 1 to 9. If OEMID is configured in applications, it only can run in PT800 which configures the same OEMID. The configuration of OEMID is in <uTools 2 User’s Manual>.

Configure connecting information



1. Connect directly with cable

This kind of connecting method can make you able to dial up to any Windows 2000 PC for the PT800, forming a net of TCP/IP between PT800 and Windows2000, which needs a setting to Windows 2000 at first. But this is not a direct method to connect with Internet unless to fix Windows 2000 a proper software to share with Internet, which can combine PT800 with Windows 2000 via Internet.

2. Dial-up with an outside GPRS / CDMA

If you have an outside GPRS / CDMA modem, or a cellular phone with GPRS function fixed to the port of PT800, it is able for you to connect PT800 communication to Internet with the outside GPRS / CDMA modem or GPRS / CDMA cellular phone.

3. Dial-up to an output modem

This connecting method requires you an output modem of telephone line, the modem we use to dial up for a PC, to link with modem of the port of PT800, then PT800 combine the output modem to the Internet system.

4. Dial-up with the usage of input GPRS / CDMA

This connecting method makes use of an input GPRS / CDMA modem to Internet. If a PT800 is of input GPRS / CDMA modem you can run the machine with this method.

At the page for “Config dial-up connections”, you can press the keys of up and down to choose combination, and then tick the indicators at the bottom of screen to select the function you want. We offer four different kinds of function we could at present:

“Dial up”: to dial up with the current method.
*After success of dial-up, the PT800 will get an address of IP, which will be shown at the end of message came from it. From then on, we can dial up to make use of the applied programs.

“EDIT”: this operation offers you a permission to revise your connecting attribute, and fit the requirement of modem. An attribute connection usually includes: the number of modem port, the baud rate of modem for its negotiation, user name and its password, etc., which are needed to be offered when a dial-up is required. It is a certain different attribute with the usage of different kinds of modem, such as APN (Access Point Name) is the special configure for GPRS modem while telephone number is the special configure for its own modem.

“Set to default”: set the current combination as the acquiescence connection, and mark a star * in front of the connecting method.

“Copy”: set a duplicate for the setting of connection chosen. After this operation the system will bring out a new page, and ask you to give a name for the new duplicate, as well as to compile a new name for its attribute. After that, there will appear one more connecting item in the page of information compilation, such as showed in the picture bellow. The newly added input connection of GPRS is the name you just gave to the duplicate added.

Connecting Network of default configure

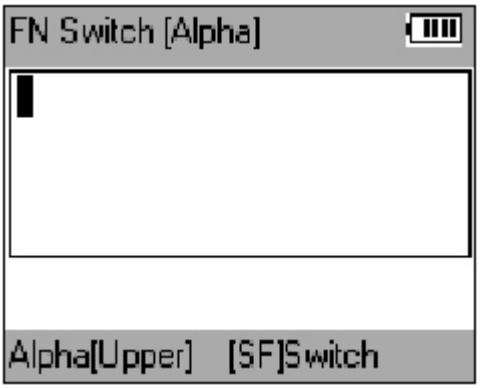
If a certain connecting configure is often in use, you can set it in the page “configuration of connecting information” you mentioned

Disconnect current link

When you do not need to use the network any more, must make use of this choice function to cut the link to network. In the instance not yet to disconnect network, the internet service provider (ISP) probably continues the charge to your linking network.

It is necessary to make sure whether the SIM card is already plugged well at first before the usage of inserted GPRS / CDMA modem to dial. And please pay attention to the card mark on where for SIM card to insert, in order to avoid an error operation. It is by all means to cut in SIM card when the device is under the condition of turn-off.

How to use entry



We make a demo of entry in the item of Network Name at the page of Network Setting. Enter the page of Network Setting. Make a selection for Network Type to be “GPRS”, move the cursor to Network Name, and press the key “ENT” to choose the item.

At this time to press Switch key to bring the editing bar. Press Switch key to choose capitalization or small for Letter. Press Function key to switch Letter, Symbol, Chinese, and Number. An entry demo of “ABS!@新5” is shown below:

When to enter Letter, a key corresponds to multi-letter, the first press corresponding to the first letter, and so on. And when to enter the corresponding letter with the same key, reenter the next letter after the former letter has already appeared in the entry bar. To enter corresponding letter with different key, it is able to enter the next letter after the entry.

Step 1：Press Switch, in the state of capitalization letter. Press key 7, to enter A with an entry, and to enter B with twice entry after the A has been shown in the entry bar. Press key 1 to enter S with an entry.
When to input Symbol, a key corresponding to a symbol, press up and down keys to turn over pages.

Step 2：Press function key to input in the status of Symbol, press key3 to input! press key down, and press 2 to input @.
As to enter Chinese, the order for the related key is same to that of a Chinese pinyin. Press key “。”, and to press the corresponding number key for this Chinese, then the Chinese entered appears.

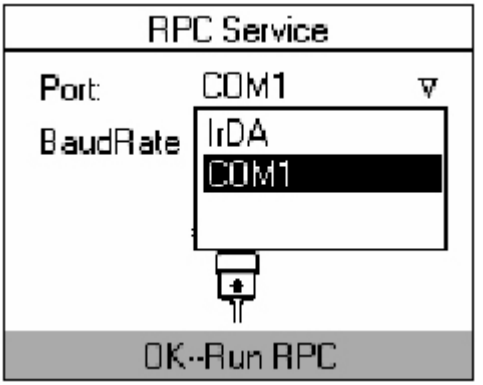
Step 3：Press Function key, in the state of Chinese to enter, press key 2, 9, and 5 in order. Press key “。”, and press the key 0 to enter“新”.
When to enter Number, a key related to a number.

Step 4：Press Function key, in the state of Number to enter, press key 5 to enter 5.

What is RPC?

A function of information transaction permits a useable service of callout terminal with distributing application program. The remote processing call is also named as RPC in the usage of the computer remote management.

How to use RPC?



In the page of Startup RPC, choose Communication Interface, and to press the key OK to start RPC. At the end of PC, application program is able to operate text and system information obtained and so on with the call of Remote Processing Function Library, RAPI.DLL. For example: to operate the text with USERVICE offered by our company.

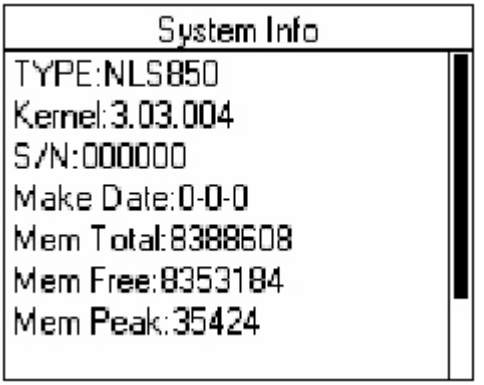
How to choose serial ports?

Infrared Port: communicated through Infrared Port
COM1: communicated through RS232
*USB: communicated through USB
COM1[u]: communicated through ueasyfile protocol of COM1
Infrared Port[u]: communicated through ueasyfile protocol of Infrared Port

Note: PC should be installed USB driver.

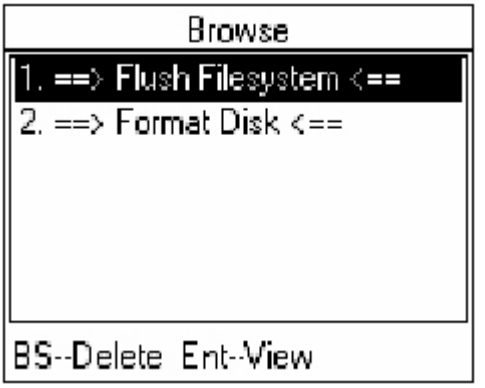
Operation of Program

Refer to How to Operate an Application Program in the Section of The Setting of System



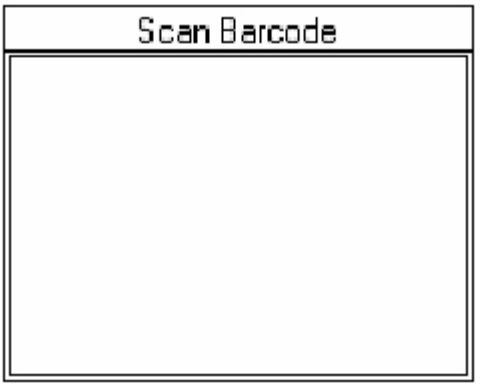
In the page of System Information, the relevant message about PT800 is described, facility to distinguish and understand the attribute of product.

Management of Document



The management of Document is comprised of four functions:

1. Delete document.
2. Flush File system.
3. Format disk.
4. View document or examine the description of text.



To identify barcode is a program to read barcode / RFID, which is able to read data of bar code and byte number. For the Sample Code and Parameter Setting Code in detail, please refer to the list attached.

Approach to read barcode (for PT850)

Press the [PW] key to turn power on. Hold the Data Collector close to the barcode and press the trigger key.

The reading indicator light is green and the beeper beeps when the reading operation is successful.

Approach to read RFID (for PT810)

Press the [PW] key to turn power on. Hold the Data Collector close to the RFID card and press the trigger key.

The reading indicator light is green and the beeper beeps when the reading operation is successful.

Notice: When PT810 with different RFID modules reading RFID cards, they have differences in distance and angel.
When using PT810 to read RFID cards, it has to adjust the distance and angel of the device and cards to get the perfect reading results.

Precautions to read barcode of PT850

Adjust the angle of device to barcode, and the distance between both of them, in order to let the width of laser beam enlarge a little bit to the width of barcode, and able to obtain a great effect to code reading.

YES

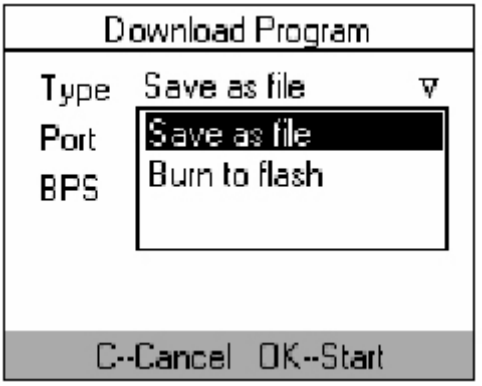
NO

YES

NO

YES

NO



At the page of download of program, there is a choice of save as document or save as a core in the type of document, and a choice of COM1 or infrared port in its port. To download with a press on the key of OK while to withdraw press C.

Common Malfunctions and Remove

Malfunction Description	Simple way to remove
LCD screen does not work	1. Examine whether power is turned on or enter the state of dormancy 2. Examine whether the battery is out of power or a badness contact. 3. The application program loaded crashes in the system.
The time of usage is not long after a full charged.	1. Examine whether the battery is charged full enough. 2. Examine whether the battery is invalid. If invalid, please exchange a new one.
Unable to operate RS232 Communication	1. Examine whether the communication interface is inserted correctly 2. Examine baud rate setting are same for both communication interfaces of PT800 and PC.
Unable to operate Infrared Communication	1. Examine whether the multi-function base is powered. 2. Examine whether the infrared interface of PT800 aims at the one to multi-function base correctly.
Receive error code for the RS232 or Infrared Communication	Examine baud rate setting are the same for both communication interfaces of PT800 and PC.
The indicator light is not on when to charge	Examine whether the power line to PT800 or to the multi-function base is inserted correctly or not.
Death	Please press the RESET button at the back of the device with a paper clip or other thin object.
Dial-up of GPRS and CDMA fail	1. Please examine the current electric quantity in battery is enough if embedded GPRS/CDMA modem in use, or it will fail the operation for the embedded GPRS/CDMA modem. 2. Make sure whether the function of GPRS/CDMA in SIM card is paid enough or lack of payment. 3. Please pay attention to the message of information intensity shown in screen the process of dial up of GPRS/CDMA, such as: “+CSQ: 27，99”, of which, 27 is the value to reflect the signal intensity, arranging between 8～31; the signal in wireless network is too weak if less than 8, while cannot accept any network signal if it is 0 or 99, both make you unable to connect to GPRS/CDMA. 4. if the wireless network is busy, it is probably to put you out of the connection to GPRS/CDMA for the time being, you may try it later.
Unable to read bar code	1. the way to read code is wrong. Please refer to the correct way in the Section of Reading Code in this manual. 2. Whether the setting of code is readable. 3. maybe it is unable for the device to read the code of type

Sample Codes

CODE39

NO Check

Check

Full ASCII 39

NO Check

Check

EAN-13

EAN-8

CODABAR

Book land

Interleaved 2 of 5

NO Check

Check

Code128

UPC-A

UCC/EAN 128

UPC-E

Note: If can’t read some kind of barcode, please read the programming code to set this kind “Enable”. And maybe a device can’t read all kinds of barcodes.

Programming Codes of PT850

Load all parameters factory defaults

Enable/Disable Programming Codes

Enable

Disable

Laser’s Duration of Time

If need to set the laser’s duration of time as 3 seconds, follow the steps below:

1. Read the programming code below.
2. Read digit “3” and “0”

Set Prefix and Suffix

1. Read the barcode you want to program.
2. Refer to the “Table 1” to get the ASCII value.(A: 1065)
3. Read the 4 digits you get.

Prefix

Suffix1

Suffix2

Data Format Cancel

Set Data Format

Data as is

<Data> <Suffix1>

<Data> <Suffix2>

<Data> <Suffix1> <Suffix2>

<Prefix><Data>

<Prefix> <Data> <Suffix1>

<Data> <Suffix2>

<Prefix> <Data> <Suffix1> <Suffix2>

Set Laser Trigger Mode

Level

Pulse

Continuous

Blinking

Host

Digit Code

0

1

2

3

4

5

6

7

8

9

Cancel

Security Level

The value indicates the decoding times before defining the barcode correctly read. The higher the value is, the lower the speed and the possibility of mistake will be. If the opposite, the speed will be higher.

1

2

3

4

Programming of Barcodes

UPC-A

Enable

Disable

UPC-A 2 Digits Addenda Code

Enable

Disable

UPC-A 5 Digits Addenda Code

Enable

Disable

UPC-A must be 2 Digits Addenda Code

Enable

Disable

UPC-A must be 5 Digits Addenda Code

Enable

Disable

Send System Digit

Enable

Disable

Send Check Digit

Enable

Disable

UPC-E

UPC-E 2 Digits Addenda Code

Enable

Disable

UPC-E 5 Digits Addenda Code

Enable

Disable

UPC-E must be 2 Digits Addenda Code

Enable

Disable

UPC-E must be 5 Digits Addenda Code

Enable

Disable

Send Check Digit

Enable

Disable

Send System Digit

Enable

Disable

UPC-E trans to UPC-A

Enable

Disable

EAN-8

Enable

Disable

EAN-8 2 Digits Addenda Code

Enable

Disable

EAN-8 5 Digits Addenda Code

Enable

Disable

EAN-8 must be 2 Digits Addenda Code

Enable

Disable

EAN-8 must be 5 Digits Addenda Code

Enable

Disable

EAN-8 Send Check Digit

Enable

Disable

EAN-8 trans to EAN-13

Enable

Disable

EAN-13

Enable

Disable

EAN-13 2 Digits Addenda Code

Enable

Disable

EAN-13 5 Digits Addenda Code

Enable

Disable

EAN-13 must be 2 Digits Addenda Code

Enable

Disable

EAN-13 must be 5 Digits Addenda Code

Enable

Disable

EAN-13 Send Check Digit

Enable

Disable

BOOKLAND EAN

Enable

Disable

EAN-13 2 Digits Addenda Code

Enable

Disable

Interleaved 2 of 5

Enable

Disable

Interleaved 2 of 5 Check

Enable

Disable

Code 128

Enable

Disable

UCC/EAN-128

Enable

Disable

ITF 14

Enable

Disable

ITF 14 Send Check Digit

Enable

Disable

ITF 6

Enable

Disable

ITF 6 Send Check Digit

Enable

Disable

Code 39

Enable

Disable

Code 39 Check

Enable

Disable

Code 39 Send Check Digit

Enable

Disable

Code 39 Send two * Before and After the String

Enable

Disable

Full ASCII 39

Enable

Disable

Code 93

Enable

Disable

Codabar

Enable

Disable

Codabar Delete the Beginning and Ending Digits

Enable

Disable

Codabar Use ABCD/ABCD as
Beginning and Ending Digits

Codabar Use ABCD/TN*E as
Beginning and Ending Digits

Codabar Use abcd/abcd as
Beginning and Ending Digits

Codabar Use abcd/tn*e as
Beginning and Ending Digits

Matrix 25 (China Post)

Enable

Disable

2 Out of 5

Enable

Disable

ISBT 128

Enable

Disable

MSI Plesey

Enable

Disable

Note: S means Scan Value
H means Hex Value
F means Full ASCII Code
K means Keystroke

S	H	F	K
1000	00h	%U	CTRL
1001	01h	$A	CTRL
1002	02h	$B	CTRL
1003	03h	$C	CTRL
1004	04h	$D	CTRL
1005	05h	$E	CTRL
1006	06h	$F	CTRL
1007	07h	$G	CTRL
1008	08h	$H	CTRL
1009	09h	$I	CTRL
1010	0Ah	$J	CTRL
1011	0Bh	$K	CTRL
1012	0Ch	$L	CTRL
1013	0Dh	$M	CTRL
1014	0Eh	$N	CTRL
1015	0Fh	$O	CTRL
1016	10h	$P	CTRL
1017	11h	$Q	CTRL
1018	12h	$R	CTRL
1019	13h	$S	CTRL
1020	14h	$T	CTRL
1021	15h	$U	CTRL
1022	16h	$V	CTRL
1023	17h	$W	CTRL
1024	18h	$X	CTRL
1025	19h	$Y	CTRL
1026	1Ah	$Z	CTRL
1027	1Bh	%A	CTRL
1028	1Ch	%B	CTRL
1029	1Dh	%C	CTRL
1030	1Eh	%D	CTRL
1031	1Fh	%E	CTRL
1032	20h	SPACE	SPACE
1033	21h	/A	!
1034	22h	/B	`
1035	23h	/C	#
1036	24h	/D	$
1037	25h	/E	%
1038	26h	/F	&
1039	27h	/G	‘
1040	28h	/H	(

S	H	F	K
1041	29h	/I	)
1042	2Ah	/J	*
1043	2Bh	/K	+
1044	2Ch	/L	‘
1045	2Dh	-	-
1046	2Eh	.	.
1047	2Fh	/	/
1048	30h	0	0
1049	31h	1	1
1050	32h	2	2
1051	33h	3	3
1052	34h	4	4
1053	35h	5	5
1054	36h	6	6
1055	37h	7	7
1056	38h	8	8
1057	39h	9	9
1058	3Ah	/Z	:
1059	3Bh	%F	;
1060	3Ch	%G	<
1061	3Dh	%H	=
1062	3Eh	%I	>
1063	3Fh	%J	?
1064	40h	%V	@
1065	41h	A	A
1066	42h	B	B
1067	43h	C	C
1068	44h	D	D
1069	45h	E	E
1070	46h	F	F
1071	47h	G	G
1072	48h	H	H
1073	49h	I	I
1074	4Ah	J	J
1075	4Bh	K	K
1076	4Ch	L	L
1077	4Dh	M	M
1078	4Eh	N	N
1079	4Fh	O	O
1080	50h	P	P
1081	51h	Q	Q
1082	52h	R	R
1083	53h	S	S
1084	54h	T	T
1085	55h	U	U
1086	56h	V	V
1087	57h	W	W
1088	58h	X	X
1107	6Bh	+K	k

S	H	F	K
1108	6Ch	+L	l
1109	6Dh	+M	m
1110	6Eh	+N	n
1111	6Fh	+O	o
1112	70h	+P	p
1113	71h	+Q	q
1114	72h	+R	r
1115	73h	+S	s
1116	74h	+T	t
1117	75h	+U	u
1118	76h	+V	v
1119	77h	+W	w
1120	78h	+X	x
1121	79h	+Y	y
1122	7Ah	+Z	z
1123	7Bh	%P	{
1124	7Ch	%Q	|
1125	7Dh	%R	}
1126	7Eh	%S	NULL
1127	7Fh	Undefined	Undefined